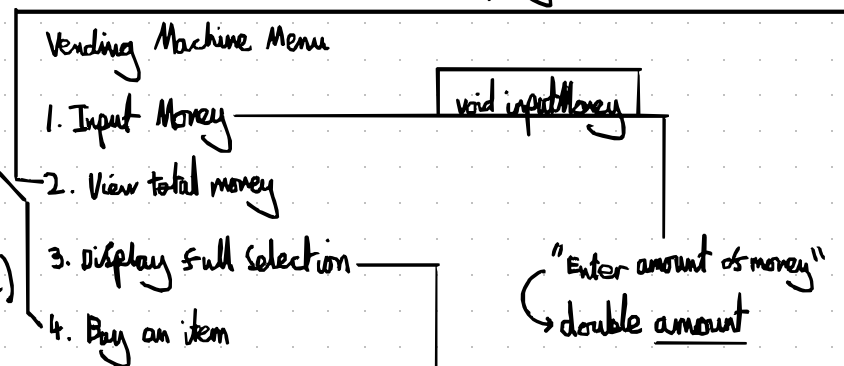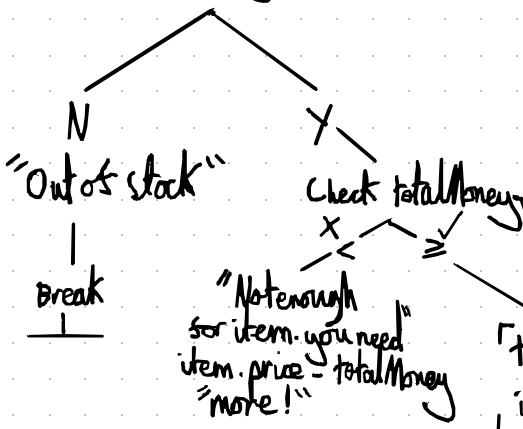main → construct vending Machine
↓
Display menu

buyItem (totalmoney, vendingMachine)
|
int row, col
|
"Enter row:" → row
|
"Enter column" → col
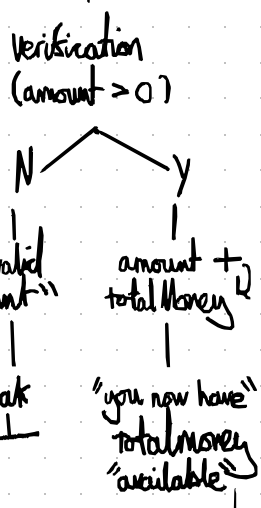|
Validate (within range)
|
fetch item (row, col)
|
check stock using isAvailable

Vending Machine Menu

1. Input Money ————————————— void inputMoney
2. View total money
3. Display full selection ————
4. Buy an item
5. Exit

"Enter amount of money"
↳ double amount

(x)
loop for no. of items
┌ loop for attribs (y)
│ "Item at x + y:
│ Name | Price | Stock
│ + Availability (stock > 0)
│   true / false)
└

Verification
(amount > 0)

N   Y
"Out of stock"   Check totalMoney
| X   ≥
Break   "Not enough
          for item. you need
          item. price - totalMoney
          "more!"

N   y
"Invalid   amount +
amount"   totalMoney
| |
Break   "you now have"
         totalMoney
         "available"

Break

┌ total Money ┐
└ item. price ┘
|
take away 1 from
stockCount

switch isAvailable
if no more items
are available

total Money ←

Exit [5]

Breaks program using
a while loop

while choice != 5

Constructor

struct Item
Double price   price p;
int stockCount   stockCount s; ⟩
bool isAvailable isAvailable (s > 0)
string name   string n;

Vending Machine
25 items = name-price-stock

Elliot Holley - proto one